

What is Claimed is:

1. A safety disposable lighter, comprising:

a gas casing having a liquefied gas cavity;

5 a supporting frame, which is sealedly mounted on said gas casing, comprising two supporting walls upwardly and parallelly extended from said supporting frame;

a gas valve having a gas nozzle upwardly extended from said supporting frame and communicating with said liquefied gas cavity;

a gas lever pivotally mounted between said supporting walls for actuating said gas valve to release gas from said liquefied gas cavity;

10 a flint supported by a resilient unit on said supporting frame at a position between said two supporting walls;

15 a striking wheel assembly comprising a striker wheel rotatably mounted between said supporting walls to frictionally contact with said flint, and two driving wheels, each having a diameter larger than a diameter of said striker wheel, coaxially mounted at two sides of said striker wheel respectively and arranged in such a manner that when said driving wheels are rotated, said striker wheel is driven to rotate and strike against said flint to produce sparks towards said gas nozzle so as to ignite said emitted gas; and

20 a shielding frame, which is securely mounted on said supporting frame, comprising:

25 a U-shaped wind shielding guard having a top ceiling and a top flame gate formed thereon to align with said gas nozzle, wherein said wind shielding guard has a predetermined height that when said emitted gas is ignited to produce a lighter flame, a visible portion of said lighter flame is exposed to outside through said top flame gate while a root portion of said lighter flame is positioned below said top flame gate for preventing said lighter flame from being blown out; and

a pair of safety guards integrally and rearwardly extended from two sidewalls of said wind shielding guard respectively and defined an ignition cavity between said two safety guards to rotatably receive said striking wheel assembly in said ignition cavity, wherein each of said safety guards has a top edge rim horizontally extended from said top ceiling of said wind shielding guard to a position above a top circumferential edge of said respective driving wheel, such that said safety guards form as a physical barrier for preventing a thumb of a child from fully engaging with said driving wheels to drive said striker wheel to rotate.

2. The safety disposable lighter, as recited in claim 1, wherein said top edge rims are integrally extended from said top ceiling of said wind shielding guard at two side edges of said flame gate respectively to form a horizontal platform shelter to not only shelter said root portion of said lighter flame within said wind shielding guard for preventing said lighter flame from being blown out but also cover said top circumferential edges of said driving wheels for preventing said driving wheels from contacting with said thumb of said child.

3. The safety disposable lighter, as recited in claim 1, wherein each of said safety guards further has a rear edge rim upwardly extended from said supporting frame and a curved corner rim integrally extended from said top edge rim to said rear edge rim to form an arc-shaped wheel covering rim coaxially positioned at an outer side said respective driving wheel, wherein a radius of each of said wheel covering rims is slightly larger than a radius of said respective driving wheel such that said driving wheels are encircled by said wheel covering rims respectively.

4. The safety disposable lighter, as recited in claim 2, wherein each of said safety guards further has a rear edge rim upwardly extended from said supporting frame and a curved corner rim integrally extended from said top edge rim to said rear edge rim to form an arc-shaped wheel covering rim coaxially positioned at an outer side said respective driving wheel, wherein a radius of each of said wheel covering rims is slightly larger than a radius of said respective driving wheel such that said driving wheels are encircled by said wheel covering rims respectively.

5. The safety disposable lighter, as recited in claim 3, wherein said rear edge rim is vertically extended from said supporting frame at a position behind a rear circumferential edge of said respective driving wheel such that at least a quarter of a

circumference of said driving wheel between said top circumferential edge and said rear circumferential edge thereof is encircled by said respective wheel covering rim.

6. The safety disposable lighter, as recited in claim 4, wherein said rear edge rim is vertically extended from said supporting frame at a position behind a rear circumferential edge of said respective driving wheel such that at least a quarter of a circumference of said driving wheel between said top circumferential edge and said rear circumferential edge thereof is encircled by said respective wheel covering rim.

7. The safety disposable lighter, as recited in claim 3, wherein each said corner rim of each of said safety guards is rearwardly extended from said rear edge rim thereof to form said wheel covering rims having a semi-circular shape to encircle a rear circular portion of the respective driving wheel, such that at least a quarter of a circumference of said driving wheel between said top circumferential edge and a rear circumferential edge thereof is encircled by said respective wheel covering rim.

8. The safety disposable lighter, as recited in claim 4, wherein each said corner rim of each of said safety guards is rearwardly extended from said rear edge rim thereof to form said wheel covering rims having a semi-circular shape to encircle a rear circular portion of the respective driving wheel, such that at least a quarter of a circumference of said driving wheel between said top circumferential edge and a rear circumferential edge thereof is encircled by said respective wheel covering rim.

9. The safety disposable lighter, as recited in claim 3, wherein a width of said corner rim of each of said safety guards is larger than a width of said top edge rim thereof for preventing said thumb of said child from contacting with said respective driving wheel.

10. The safety disposable lighter, as recited in claim 4, wherein a width of said corner rim of each of said safety guards is larger than a width of said top edge rim thereof for preventing said thumb of said child from contacting with said respective driving wheel.

11. The safety disposable lighter, as recited in claim 6, wherein a width of said corner rim of each of said safety guards is larger than a width of said top edge rim thereof

for preventing said thumb of said child from contacting with said respective driving wheel.

12. The safety disposable lighter, as recited in claim 8, wherein a width of said corner rim of each of said safety guards is larger than a width of said top edge rim thereof
5 for preventing said thumb of said child from contacting with said respective driving wheel.

13. The safety disposable lighter, as recited in claim 6, wherein said wheel covering rim of each of said safety guards has a smooth rim surface for preventing said thumb of said child from driving said driving wheels to rotate.

10 14. The safety disposable lighter, as recited in claim 8, wherein said wheel covering rim of each of said safety guards has a smooth rim surface for preventing said thumb of said child from driving said driving wheels to rotate.

15 15. The safety disposable lighter, as recited in claim 11, wherein said wheel covering rim of each of said safety guards has a smooth rim surface for preventing said thumb of said child from driving said driving wheels to rotate.

16. The safety disposable lighter, as recited in claim 12, wherein said wheel covering rim of each of said safety guards has a smooth rim surface for preventing said thumb of said child from driving said driving wheels to rotate.

20 17. The safety disposable lighter, as recited in claim 6, wherein a center of each of said wheel covering rims is concentrically positioned at a center of said respective driving wheel.

18. The safety disposable lighter, as recited in claim 8, wherein a center of each of said wheel covering rims is concentrically positioned at a center of said respective driving wheel.

25 19. The safety disposable lighter, as recited in claim 15, wherein a center of each of said wheel covering rims is concentrically positioned at a center of said respective driving wheel.

20. The safety disposable lighter, as recited in claim 16, wherein a center of each of said wheel covering rims is concentrically positioned at a center of said respective driving wheel.